

RUSK

Capturing the Momentum of Rehabilitation Medicine
at NYU Langone Medical Center

FALL 2011





“The greatest thing in the world is not so much where we stand as in what direction we are moving.”

— Oliver Wendell Holmes, Sr.

From The Chairman

Rusk’s past accomplishments and current standing as a leader in physical medicine and rehabilitation (PM&R) reflect a rich tradition of pioneering excellence in clinical care, research and education. But to borrow from Oliver Wendell Holmes’ eloquent phrase, the greatest thing in Rusk’s world is not so much our current standing, but where we are headed next.

Fueled by our achievements to date, we are embarking on a mission to advance the field of PM&R by improving the accessibility of our outstanding patient-centered care, invigorating the growth of cutting-edge research and extending the reach of our educational programs.

We are evolving to better meet the needs of our patients in a challenging and ever-changing healthcare environment by expanding our outpatient programs beyond our main campus and into the neighborhoods where our patients live. The Center for Musculoskeletal Care (CMC)SM—a new, state-of-the-art facility combining the talents of Rusk, the Department of Orthopaedic Surgery, and the Divisions of Rheumatology and Pain Medicine—is slated to open in early 2012.

As you will read in this edition of RUSK, we plan to continue advocating for the needs of people with disabilities through mass media venues, pursue educational opportunities throughout the world, and explore new avenues of research. We are pleased to honor the vision of Howard Rusk and of my immediate predecessor, Matthew H.M. Lee, by sustaining their efforts to spread quality rehabilitation around the globe, most recently realized in an agreement to collaborate with our colleagues at Qingdao Municipal Hospital in Shandong, China.

I hope you enjoy reading about the direction we are taking at the Rusk Institute of Rehabilitation Medicine in this and future issues of RUSK.

Steven R. Flanagan, MD

Chairman, Department of Rehabilitation Medicine
Medical Director, Rusk Institute of Rehabilitation Medicine

Top Five at Rusk

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Brain Trust: Comprehensive Care in Neurorehabilitation

In the rehabilitation of brain injuries, there is no room to accept limitations. While every type of recovery entails idiosyncratic challenges, neurorehabilitation is distinct in the necessity to overcome not only medical and physical problems but also the cognitive and behavioral hurdles that accompany brain injury and disease. Rusk's Brain Injury program offers comprehensive rehabilitation management for brain-injured patients at all points along the continuum of recovery, covering all facets, from any cause of injury.

Our Brain Injury/Neurorehabilitation Unit comprises a singularly qualified

interdisciplinary team of physiatrists, rehabilitation nurses, physical and occupational therapists, speech and language pathologists, neuropsychologists and social workers. Having a diversely talented, specialty-trained staff enables us to draw on specific expertise within the context of team care.

The team's therapists have specialized training for neurorehabilitation (e.g., NDT training and A1 certification) and are assigned expressly to the brain injury unit. They provide a therapist-to-patient ratio of 1:1 or 2:1 in private sessions totaling three or more hours per day. Patients receive additional hours in our recreational therapy program, which includes pet-assisted therapies, and a close partnership with pastoral care services supports our patients' spiritual needs.

Among our physicians are fellowship-trained physiatrists in brain injury. In tandem with the team and one another, Jaime M. Levine, DO, medical director of brain injury rehabilitation, and Michal E. Eisenberg, MD, follow the arc of patient recovery beginning with initial acute medical and surgical care (provided in collaboration with neurosurgeons and/or neurologists from Tisch Hospital), on to inpatient rehabilitation services, and continuing through outpatient rehabilitation as the patient reenters and reintegrates in the community.

A review by the Commission on Accreditation of Rehabilitation Facilities (CARF) earned high marks for our Brain Injury/Neurorehabilitation Unit. In a letter following their survey, the commission wrote:

"...CARF surveyors made no recommendations, which signifies that they did not identify any areas of nonconformance to the standards. This is an extraordinary accomplishment, as only 3% of CARF surveys result in no recommendations."

Achieving top international standing in the eyes of accreditors represents a proud milestone and recognition of our dedication to the needs of brain injured patients. These encouraging words provide even more momentum towards our long-standing goal: optimizing care and advancing brain injury rehabilitation through comprehensive and coordinated programs with a multidisciplinary, collaborative perspective.

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It Takes a Team: Rusk Pediatrics

In the halls of our Pediatric Rehabilitation wing, it is routine to encounter three or four specialists huddled together in spontaneous consultation. They may be shuffling treatment schedules to accommodate a patient's nap, or perhaps comparing notes on how a mother is coping.

Nimble collaboration is emblematic of the Pediatric Department's approach to care, which meets the medical, functional and developmental needs of young patients with a holistic philosophy shared by a tightly knit multidisciplinary team. The entire unit is keenly aware that constant communication is needed to understand and manage a child's overall functioning.

The department's perspective is that each child arrives as a member of a community and, during rehabilitation, becomes part of Rusk's own social network of occupational and physical therapists, speech therapists, psychologists, physiatrists, nurses, social workers, teachers, and fellow patients. With only 167 specialists in the country board-certified in pediatric rehabilitation, Rusk is unique in having two on staff: Joan Gold, MD, medical director of pediatric rehabilitation, and Renat Sukhov, MD.

Existing within an academic medical center further benefits the Pediatric Rehab unit, notably in the staff of pediatric nurse clinicians, each of whom is baccalaureate-prepared. Nurse manager Paula M. Reynolds, MA, RN, who's been with the department for nearly 25 years, oversees a staff of 14 seasoned nurses and 11 patient care technicians. Together they work around the clock at the intersection of numerous departments, ensuring that clinical treatment is interwoven with social and developmental care. Says Ms. Reynolds, "We find that their experience here is empowering; parents tell me their children learn to advocate for themselves."

Programs designed around in-hospital schooling and at-home weekends have proven enormously productive in keeping patients on a parallel track to normalcy prior to reentry.

Pediatric rehabilitation is dynamic, evolving not only over the course of an inpatient stay but throughout a child's reintegration at home and at school.

Remaining at the forefront of pediatric care with state-of-the-art technology and techniques—such as our recently acquired Lokomat®, which helps children relearn to walk, and a leading edge brain injury program—has proven invaluable in expediting patient progress.

Planning for Rusk patients does not end at their discharge; children with ongoing rehabilitation needs continue to receive care at Rusk's outpatient settings, while the rehab team effectively ushers a child back into his or her school community. Members of each discipline prepare a report in support of an Individual Education Program (IEP), which team members use in conjunction with parents to advocate for the child's reentry into school.

"At its essence, the multidisciplinary program grew from a grassroots effort to provide a service that was not there before," says Senior Psychologist Marie Briody, PhD. "How do we provide optimal care? What is in the best service of this child and family? These are the questions we routinely ask ourselves and each other. The programs at Rusk are launched and developed by seeking the best solutions to difficult circumstances."

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Rehab Ambassadors: Rusk Extends Its Global Reach

Seeing beyond boundaries has been a hallmark of Rusk since its inception. Today, an array of international initiatives

both at home and abroad seeks to inspire the careers of tomorrow's specialists. Firmly established as a thought leader domestically, Rusk pursues several ongoing programs to share knowledge and advance the practice of rehabilitation on a global scale.

In the past year alone, our Visiting Scholar Program has offered clinical observerships to physicians hailing from China, Thailand, Italy and Brazil. Each visiting physician learns directly from Rusk faculty and is invited to rotate through our specialties and observe advanced clinical practices in the field.

Many arrive at our door already credentialed as physician leaders in their native countries, and return home as ambassadors for implementing world-class rehabilitation programs and services.

Honoring the tradition of Dr. Howard Rusk, who had a passion for developing comprehensive medical rehabilitation around the world, our experts offer presentations and discussions on nearly every continent. Our faculty has given more than 50 presentations to international audiences in the past few years on topics including neuropsychology, comprehensive musculoskeletal care, and the medical management of traumatic brain and spinal cord injuries. Recent guest lectures in Poland, Canada, Greece, Korea, India and China have addressed the current and future progress of rehabilitation medicine.

Here at home, in May 2011 we hosted an international conference in tandem with the Sunnaas International Rehabilitation Network, drawing participants from hospitals in Norway, Sweden, Russia, China, Israel and the Middle East. The well-received conference addressed the emergence of international clinical research as well the continuum of rehabilitative care for individuals with traumatic brain injuries and their families.

This fall we embark on a new, international physical therapy program in China, building on the “Rusk Without Walls” philosophy developed by Dr. Mathew H.M. Lee, former chairman of Rusk. A formal Rehabilitation Medicine and Physical Therapy training program will launch in October of 2011 in partnership with the Qingdao Municipal Hospital located in the Shandong Province in China. Rehabilitation Medicine is a rapidly growing field in China, and Rusk—committed to a global vision—aims to lead the way with regional training programs for a future generation of academics, physicians and therapists.

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Rehab of the Future: Q&A with Research Director, Tamara Bushnik

For decades, Rusk has been at the vanguard of rehabilitation medicine. Tamara Bushnik, PhD, has championed our pioneering efforts since she became research director in Fall 2009. A recognized leader in her field, Dr. Bushnik chaired the 2011 Federal Interagency Conference on Traumatic Brain Injury (TBI), and we're proud to announce that

she will be president of the American Congress of Rehabilitation Medicine (ACRM) as of October 2011.

What distinguishes research at Rusk?

Without question: the enthusiasm of our research staff. We have a team of fabulous, dedicated medical professionals, and they're supported by an institution that appreciates their work. Research is one of the three major prongs at NYU Langone—in addition to clinical care and education—and we're in the fortunate position of having a chairman who values what we do.

How has the program developed in the two years that you've been director?

The momentum of our initiatives has increased. We've doubled the number of NIH grants submitted and more than doubled the number of pilot grants, with seven applications submitted in 2010 and fifteen in 2011. The content of grants has become more interdisciplinary, with greater participation from therapy departments. One recent submission, for example, focuses on using the newly donated Lokomat® in physical therapy sessions for children with cerebral palsy. We're also making a lot of progress with the inpatient registry implemented last year, which will help us involve patients in future research.

Can you speak more about the interdisciplinary aspect of Rusk Research?

At the grassroots level, we're committed to ensuring that rehabilitation is integral to the musculoskeletal pathway. Clinicians and researchers have begun to explore research in young athletes with knee injuries; specifically, to help them avoid the currently inevitable path towards surgery. We also have several pilot initiatives underway in collaboration with NYU's Steinhardt School of Culture, Education, and Human Development, including a joint manuscript in press focusing on music therapy for stroke patients.

What other initiatives reflect Rusk's commitment to the three pillars of research, education and clinical care?

Several projects pair research and education, including two post-doctorate programs launching in September. An additional grant has been submitted for a five-year post-doctorate training program with psychology, consisting of 75% research and 25% clinical activity, and we're working on a rehabilitation science program in collaboration with NYU that focuses on pediatric and adolescent concussion. Our Research Advisory Council is also exploring how research can be further integrated into the everyday learnings of the Rehab Medicine resident.

How will your department continue to expand its reach?

In January 2012, NYU Langone is opening a new, state-of-the-art outpatient facility for musculoskeletal patient care and research—the largest of its kind in the country—and Rusk Rehab will be an integral component. The facility will provide the community with even greater access to our services and opportunities for patients to participate in research studies. The additional space will also be a boon to recruitment as the research team grows.

On a global scale, I feel it's crucial that our research efforts become more international. We're committed to the “Rusk Without Walls” philosophy, which supports the sharing of knowledge across cultures and continents, and we've already begun exploring opportunities for comparative effectiveness between countries, focusing on TBI and stroke. As president elect of ACRM, it is my number-one agenda item to engage in research efforts on a global level, and Rusk will undoubtedly have a major role in that initiative.

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Rusk In The News

Rusk faculty are frequently in demand by the media, who seek out our experts for credible, insightful commentary, as evidenced by the sampling of news stories, here:

- On July 15th, *Crain's Health Pulse* newsletter notes **Rusk** as one of the only hospitals in the area to have a Lokomat® robotic gait therapy system available for patients.
- On June 24th, **Dr. Preeti Raghavan** was quoted in an article on ABCNews.com about devices used to help people with paralysis and the value of integrating technology as a means of enabling the use of multiple joints.
- In the June/July issue of *Neurology Now*, **Drs. Karen Riedel** and **Martha Sarno** were quoted on the value of caregivers in helping aphasia patients in their recovery process.
- In the June issue of *Prevention Magazine*, **Dr. Alex Moroz** comments on the role acupuncture therapy can have on digestive conditions.
- On May 26, **Dr. Jaclyn Bonder** provided her perspective to *HealthDay* on the value of a study examining the widening of a woman's pelvis during the aging process.
- On May 4th, a WebMD.com article featured **Dr. Alex Moroz's** comments on how back pain is often associated with depression and anxiety and the value of therapy and relaxation techniques such as Tai Chi in overall rehabilitation.
- **Dr. Jonathan Whiteson** commented in an April 30th *HealthDay* article about the conflicting data from studies looking to find a connection between religion and lower incidences of hypertension.
- **Drs. Steven Flanagan, Mary Hibbard, and Jaime Levine** continue to be called on frequently to provide comments on the importance of rehabilitation after a traumatic brain injury, particularly following highly visible cases such as Gabrielle Giffords. Stories featuring Rusk's brain injury experts appeared in *Time Magazine, AP Television, ABC World News Tonight, CNN.com* and *CBS.com*.
- An NPR "*Radiolab*" segment aired in January featuring **Dr. Michal Eisenberg** speaking on rehabilitation programs for complex brain injuries; it continues to be replayed across the country.
- **Bob Lindsey** spoke to *Queens Public Television* about the importance of vocational rehabilitation as a key component in building the skills and sense of self-worth needed to reenter the employment field and become a positive contributor to society after a significant health event. This long-feature story on the mental health system will appear in early 2012.

Rusk Institute of Rehabilitation Medicine

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